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Briefing Report to the Chairman, Committee on Government Operations, House of Representatives

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December 1987

ADP PROCUREMENT

COMPLETED

Army Accounting System Modernization

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United States
General Accounting Office
Washington, D.C. 20548

Information Management and
Technology Division

B-225238

December 28, 1987

The Honorable Jack Brooks
Chairman, Committee on Government
Operations
House of Representatives

Dear Mr. Chairman:

In your letter of January 16, 1987, you requested that we review the Army's automation strategy and plans for modernizing its accounting systems. You were particularly concerned about the cost of the modernization and whether the Army's plan to replace automated data processing (ADP) equipment at the U.S. Army Finance and Accounting Center located at Ft. Benjamin Harrison, Indiana, would unnecessarily restrict competition among vendors. You were also concerned that Army-wide restrictions on competition could result from the Army's effort to standardize all of its ADP architecture and operating systems, not just those that support accounting systems.

On August 12, 1987, we briefed your committee staff on the results of our work on the automation strategy for the accounting system modernization and the replacement of computer equipment at the Center. We agreed to provide this report highlighting the key facts presented at the briefing. We also plan to issue a separate report on the potential effects of Army-wide ADP standardization efforts.

In the course of our review, we examined Army planning documents; requests for funding; status reports on development efforts; memorandums of agreement among senior Army officials; documents assigning responsibilities to organizations and individuals; and applicable laws, regulations, and instructions. We also had numerous discussions with Army officials concerning the computer acquisition strategy for the accounting systems modernization and, specifically, the planned replacement of the Center's ADP equipment. See appendix I for a detailed description of our methodology.

Introduction

During fiscal year 1986, the Center's main automated systems accounted for the Army's $93 billion appropriation and made disbursements (primarily for payroll and transportation) of over $28 billion. According to Army documents, these systems are old, in many cases contain application programs that date back to the early 1970s, are poorly suited to

their current applications, and are inadequate to meet current management and legal requirements. For example, in a 1986 report required by the Federal Managers' Financial Integrity Act, the Army stated that 31 of its 52 accounting systems did not comply with the Comptroller General's principles, standards, and related requirements for accounting systems.

To overcome these deficiencies, the Army is modernizing its accounting systems. This process began in the late 1970s as several individual projects and has evolved into a single effort planned for completion in 1992—assuming adequate funding. According to the Army's Director of Finance and Accounting, the modernization has historically had problems competing with other Army programs for funding.

The Army has also had problems in the overall management of the modernization. In May 1987, for example, we reported[1] a lack of management authority and control over this effort and recommended the appointment of a project manager. As a result of our review, the Army appointed the Director of Finance and Accounting—a senior official in the Office of the Assistant Secretary of the Army for Financial Management. His duties include overseeing the modernization strategies and assuring that these strategies are integrated into the Army's automation/communication architecture.

The Army's overall strategy is to consolidate its 52 existing accounting systems into a family of eight subsystems that would be structured into three major components: departmental accounting would allocate and account for appropriated funds, and produce department-level reports and financial statements; field-level accounting would provide the necessary accounting functions at the installation and activity level; and payroll accounting would disburse payments to Army military and civilian personnel.

The Army has upgraded the Center's original Sperry/UNIVAC computers four times since their installation in 1979, with a fifth upgrade currently underway. Army documents indicate that a primary purpose of these interim upgrades was to support two of the Army's accounting modernization efforts—the Military Pay Redesign and the Program and Budget Accounting System. In 1985 the General Services Administration raised questions about the number of interim upgrades and required the

[1] Accounting Systems: Army's Efforts To Redesign Its Accounting Systems (GAO/AFMD-87-18, May 19, 1987).

Army to submit a comprehensive procurement plan for the competitive replacement of the computers. In response to this direction, the Center developed a plan calling for the award of a replacement contract in 1989. Funding for this plan, however, was not approved by the Army. At the close of our review in September 1987, another request for $48 million was pending within the Army to replace the equipment beginning in fiscal year 1990.

Current Estimate Does Not Include All Costs

In 1986, the Army estimated the total cost for the modernization at $380 million. This figure included costs attributable to replacing the Center's Sperry/UNIVAC computers. Subsequently, the Army updated its estimated development costs and transferred certain funding responsibilities—including the cost of replacing the Sperry/UNIVAC computers and other equipment needed to support the modernization—to other Army organizations. This reduced the Army's official cost estimate for modernization to $277 million. According to Army officials, this transfer was not intended to hide program costs, but was an attempt to place funding responsibilities at the appropriate Army organizational level.

While we agree with the Army's attempt to place funding responsibilities at an appropriate level, Department of Defense directives for acquiring automated systems specify that all life-cycle costs (including those for equipment) be included in the estimated costs of a program. If this is not done, both Defense and the Congress, in approving the program, may be unaware of important program elements. We therefore believe that it is important that the Army, when disclosing the estimated cost of the modernization, include all its computer hardware costs. At the time of our review, the Army was still in the process of developing overall equipment requirements and had not completed the studies and analyses needed to determine the requirements. Consequently, except for the $48 million requested by the Center to replace the Sperry/UNIVAC equipment, the Army was unable to estimate how much its equipment needs would increase the $277 million modernization cost estimate. At the close of our review, the Army's Director of Finance and Accounting indicated that the Center would update the program's cost estimate to include all computer equipment costs when the requirements studies and analyses are completed. As of March 1987, the Army had spent about $110 million on the accounting system modernization.

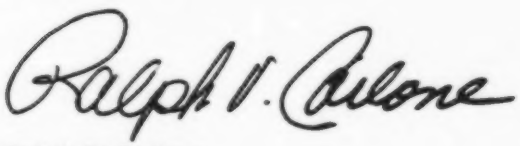
Army Standardization Requirements Could Have Affected Competition

Although the Army was still in the early planning stages of this procurement, we noted a situation which, if not properly managed by the Army, could have unnecessarily restricted competition. This situation concerned the Army's designation of a particular ADP architecture and computer operating system. More specifically, the Army included what it refers to as 3-tier architectural standards in its Accounting System Strategic Plan. According to Army officials, these 3-tier standards would allow the Army to better integrate its computer systems and more efficiently use its computer resources.

Specifying particular computer operating systems, however, would have restricted competition to a select group of suppliers. In recognition of this, the Deputy Secretary of Defense, in April 1987, directed the Army to withdraw these standards. Center officials said that they intend to remove references to the standards from the next version of the Strategic Plan, scheduled to be issued in January 1988. We are reviewing the 3-tier architecture issue in more detail and will report on it as part of the separate effort mentioned earlier.

In accordance with your wishes, we did not obtain agency comments on this report. We did, however, discuss the subjects contained in this report with Army officials and have included their comments where appropriate. Unless you publicly announce the contents of this report, we plan no further distribution of it until 30 days from its issue date. At that time, we will send copies to the Secretary of Defense, the Secretary of the Army, and other interested parties. Copies will also be made available to others on request. If you have any questions about the contents of this report, please call Mr. William S. Franklin, Associate Director, at (202) 275-3188.

Sincerely yours,



Ralph V. Carlone
Director

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Abbreviations

ADP	automated data processing
AMAS	Army Materiel Command Accounting System
COEMIS-FA	Corps of Engineers Management Information System--Finance and Accounting
GAO	General Accounting Office
IMTEC	Information Management and Technology Division
JUMPS-RP	Joint Uniform Military Pay System--Retired Pay
MPR	Military Pay Redesign
NATO	North Atlantic Treaty Organization
PBAS	Program and Budget Accounting System
STANFINS-R	Standard Finance System--Redesign
STARCIPS-R	Standard Army Civilian Payroll System--Redesign
STARFIARS-R	Standard Army Financial Inventory Accounting and Reporting System--Redesign
USAFAC	U.S. Army Finance and Accounting Center

Objectives, Scope, and Methodology

We performed this review in response to your January 1987 request. Our objectives were to

- determine the overall Army strategy for modernizing its automated accounting systems, the reasons for the modernization, its management structure, and its scheduling and financing;
- determine the effect of the strategy, if any, on computer upgrades at the Center; and
- analyze the Army's plans for replacing ADP equipment at the Center and determine whether those plans would unnecessarily restrict competition among vendors.

Work relating to all of the objectives was performed at the U.S. Army Finance and Accounting Center, Fort Benjamin Harrison, Indiana. Additional work relating to the second and third objectives was done at the Software Development Center located at Fort Benjamin Harrison, Indiana, and the Army Information Systems Command located at Fort Huachuca, Arizona. We reviewed applicable laws, directives, regulations, and instructions governing the development of automated systems and the procurement of automated data processing equipment. We also examined and analyzed available planning documents, requests for funding, memorandums of agreement between senior Army officials, and tasking documents assigning responsibilities to organizations and individuals, to determine the history of the modernization, its scope, cost, time frames, and justification. We obtained and analyzed documents relating to the Army's attempt to standardize computer architecture and operating systems; and the upgrades, additions, and the planned replacement of computer hardware located at the Center.

Additionally, we met with the Army's Director of Finance and Accounting, the Information Systems Command's Senior Technical Director, the Commander of the Software Development Center at Fort Benjamin Harrison, functional system managers, and other officials from the Center, the Information Systems Command, and the Information Systems Engineering Command. We met with them to clarify information contained in the above-mentioned documents, and to obtain these officials' views on both the overall program and individual subsystems within the program, as well as on the Army's standardization efforts and computer issues dealing with production computer hardware at the Center.

We performed this review between February 1987 and September 1987. In accordance with the requestor's wishes, we did not obtain agency

comments on this report. We did, however, discuss the subjects contained in this report with Army officials and have included their comments where appropriate. We performed our work in accordance with generally accepted government auditing standards.

Background: U.S. Army Finance and Accounting Center ADP Operations

- The Center provides the Army with automated data processing for the Army's major accounting, pay, and disbursing operations.
- Major computer applications address
  - Accounting
  - Pay
  - Transportation Disbursements
- In fiscal year 1986, the Center
  - Accounted for the Army's $93 billion budget.
  - Disbursed over $28 billion.

Table II.1 U.S. Army Finance and Accounting Center Fiscal Year 1986 Disbursements

Dollars in billions

Purpose	Amount
Active Army Pay	$18.5
Retired Pay	5.8
Reserve Pay	1.1
Transportation	1.7
Other Payments	1.0
Total	**$28.1**

Background: U.S. Army Finance and Accounting Center ADP Operations

Located at Fort Benjamin Harrison, Indiana, the U.S. Army Finance and Accounting Center provides the Army's major financial operations. The Center maintains computer software applications that handle three distinct accounting and disbursing functions:

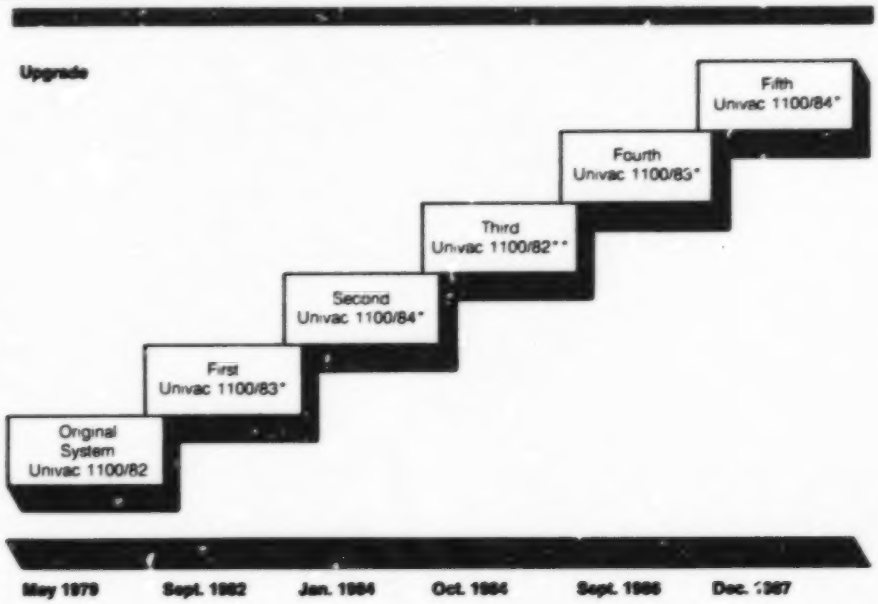
- The accounting systems distribute, account for, and report on all Army appropriated and non-appropriated funds, and other federal funds transferred to the Army (for example, the Defense Department's NATO infrastructure appropriation).
- The primary pay systems calculate and issue pay to members of the active Army and Reserves, as well as to retirees, their annuitants, and civilian employees.
- The transportation disbursement system pays transportation invoices for the Army, Air Force, and several other departments within the Department of Defense.

The Center disbursed $28.1 billion from the Army's current fiscal year budget of $93 billion. (See table II.1). When combined with the Army's multi-year appropriations and its stewardship over other federal funds, this budget brings the Center's total responsibility for accounting transactions in fiscal year 1986 to $173 billion.

Background: Need to Replace the Current Configuration

- Many current Center software applications date back to the 1970s.
- The Center's current production ADP equipment configuration is Sperry/UNIVAC.
- Since its installation in the late 1970s, the original configuration has undergone four upgrades, with a fifth underway.
- Capacity requirements were used to justify these upgrades.

Figure II.1: Upgrades to the Original Sperry/UNIVAC Configuration



*This upgrade involved the addition of a central processing unit.
**This upgrade involved the addition of another computer.

Background: Need to Replace the Current Configuration

Many of the Center's accounting systems were originally installed during the 1970s. According to the Army, unstructured changes over the years have resulted in these systems being operationally inefficient, difficult and costly to maintain, and slow or nonresponsive to management needs. Furthermore, some of the systems are not in compliance with legal requirements. For example, in a 1986 report required by the Federal Managers' Financial Integrity Act, the Army reported that 31 of its 52 accounting systems did not comply with the Comptroller General's accounting principles, standards, and related requirements for accounting systems.

The Center currently uses three Sperry/UNIVACs, each with a different configuration:

- An 1100/82 for testing and systems development,
- An 1100/83 for departmental accounting, and
- An 1100/84 to run the pay and transportation systems.

The Center also has two IBM computers—an IBM 4341 and an IBM 3083—that are reserved for back-up for the Army's computers in Europe in case of mobilization. Meanwhile, the Center, in its modernization effort, is using them to develop software.

Since it was installed in May 1979, the Sperry/UNIVAC computer configuration at the Center has been upgraded four times, and a fifth upgrade is in progress (see figure II.1). Army documents indicate that these interim upgrades were needed primarily because of an increase in required usage, equipment saturation, and to support two of the Army's accounting modernization efforts—Military Pay Redesign and the Program and Budget Accounting System.

The original Sperry/UNIVAC was a 1100/82. After completion of a fifth upgrade (scheduled for completion in December 1987), the Center's Sperry/UNIVAC computer configuration will consist of:

- An 1100/82 used primarily for testing, and
- Two 1100/84 computers used to run applications, such as departmental accounting, pay, and transportation.

Modernization Strategy: Moving to Eight Subsystems

- The strategy for modernizing accounting systems is to move from 52 systems to a small family of 8 standard subsystems by 1992.
- In 1986 the estimated cost of the modernization was $380 million. The Army transferred responsibility for funding computer equipment costs to other units and reduced the total program cost estimate to $277 million.
- As of March 1987, about $110 million had been spent.
- A modular system design approach is being used.
- Modern information processing technology will be used.
- Overall program management rests with the Director of Finance and Accounting.
- The eight standard Army accounting subsystems are
  - Program and Budget Accounting System (PBAS).
  - Standard Finance System—Redesign (STANFINS-R).
  - Standard Army Financial Inventory Accounting and Reporting System—Redesign (STARFIARS-R).
  - Army Materiel Command Accounting System (AMAS).
  - Corps of Engineers Management Information System—Finance and Accounting (COEMIS-FA).
  - Military Pay Redesign (MPR).
  - Standard Army Civilian Payroll System—Redesign (STARCIPS-R).
  - Joint Uniform Military Pay System—Retired Pay (JUMPS-RP).

Modernization Strategy: Moving to Eight Subsystems

According to Army documents, a family of eight subsystems (see table III.1) is being designed to meet the Comptroller General's standards for accounting systems, as mandated by the Accounting and Auditing Act of 1950 and the Federal Managers' Financial Integrity Act of 1982. In addition, these subsystems are being designed to improve accounting information to better serve the Army's planning, programming, and budgeting needs. The Center is directly responsible for six of these subsystems. The other two subsystems are the responsibility of the Army Corps of Engineers and the Army Materiel Command.

When completed, the eight subsystems will replace 52 Army accounting systems. The subsystems represent three major financial components—departmental, field-level, and payroll accounting. Specifically,

- PBAS will address departmental accounting. It will have the on-line capability to distribute funds directly to individual Army installations and activities. The system will also pull together and analyze field-level accounting information, and develop consolidated Army-wide financial statements.
- STANFINS-R/STARFIARS-R, AMAS, and COEMIS-FA will provide field-level accounting. These subsystems will be specially designed to address the unique needs—garrison, logistics, or engineering support—of the organizations they support. STANFINS-R will become the major garrison support system and will handle automated financial accounting and reporting for posts, camps, and stations, with STARFIARS-R as the analogous system for inventory accounting. AMAS (now being developed by the Army Materiel Command) will support wholesale logistics and research and development accounting. COEMIS-FA (now being modified by the Army Corps of Engineers) will account for military construction and public works.
- MPR, STARCIPS-R, and JUMPS-RP will be the Army's pay subsystems. MPR will handle the payroll for all Army military except Army retired personnel, which will be handled by JUMPS-RP. STARCIPS-R will handle payroll for all civilian Army employees.

The Army's Estimated Costs for Modernization

The Army's February 1986 Accounting System 5-Year Plan estimated the total cost for the accounting system redesign project at $380 million. This included costs attributable to the replacement of the Center's Sperry/UNIVAC computers. As of September 1987, the Army's most current estimate for the modernization was $277 million. This difference resulted from revisions in the estimated development costs and the transfer of certain funding requirements (including the cost of the

Sperry/UNIVAC replacement as well as other equipment requirements) to those Army organizations responsible for providing the equipment. According to Army officials, this transfer was not intended to hide program costs, but rather was an attempt to get the most appropriate Army organization to fund the equipment replacement.

While we agree with the Army's attempt to place funding responsibilities at the appropriate level, Department of Defense Directive 7920.1 specifies that all life-cycle costs, including those for equipment, be included in the estimated costs of a program. This helps ensure that both Defense and the Congress, in approving the program, are aware of important program elements. For this reason, we believe it is important that the Army, when disclosing the estimated cost of the modernization, include all its computer hardware costs. At the time of our review, the Army was in the process of developing overall equipment requirements and had not begun the special studies and analyses needed to determine the requirements. Consequently, except for the $48 million requested by the Center to replace the Sperry/UNIVAC equipment, the Army was unable to estimate how much its equipment needs would increase the $277 million modernization cost estimate. At the close of our review, the Army's Director of Finance and Accounting indicated that the Center would update the program's cost estimate to include all computer equipment costs when the requirements studies and analyses are completed. As shown in table III.1, as of March 31, 1987, the Army indicated that it had spent $111.7 million on the accounting systems modernization.

Table III.1 System Modernization Expenditures Through March 31, 1987

Dollars in thousands

Subsystems	Expenditures
PBAS	$18,150
STANFINS-R	43,302
STARFIARS-R	18
AMAS	8,094
COEMIS-FA	[a]
MPR	31,507
STARCIPS-R	10,643
JUMPS-RP	[b]
Total	**$111,714**

[a]Not known at the time of our review.

[b]Not currently being redesigned.

The Center is designing each of its subsystems using a modular approach; each subsystem will be developed in operational segments and will be brought on-line at its completion. For example, the PMAS system was divided into two segments and then separated into modules according to appropriation or function. As the modules are completed, they will be tested and put into production. Some of the modules in Segment I (fund control) were put into production on the following dates—Procurement Appropriations, March 1984; Foreign Military Sales, March 1984; Revolving Funds/Miscellaneous Appropriations, January 1985; and Operation and Maintenance, and certain other Army appropriations, September 1985, with all modules within this segment completed by December 1986.

The Army plans to use several modern information processing techniques in its redesigned accounting subsystems to speed up information processing. Accounting and pay information will be maintained by data base management systems. Query and other interactive capabilities are intended to give users direct access to information with turnaround times measured in seconds instead of days. In some cases, the actual processing of data will be done by the user.

Prior to December 1981, there was no overall management of the accounting system redesign project; each system was being developed independently. In December 1981, the Assistant Secretary of the Army (Installation Logistics and Financial Management) appointed a general officer to be the project manager. The officer was responsible for the design, development, testing, and deployment of all Army accounting systems. In July 1986, the Comptroller of the Army reorganized the project's management and directed the appointment of functional managers to carry out the various duties of the general officer. In May 1987, however, we reported that the Army still needed to strengthen the authority and control of its project manager.[1] As a result, the Army appointed the Director of Finance and Accounting—a senior official in the Office of the Assistant Secretary of the Army for Financial Management—as project manager. His duties include overseeing the modernization and ensuring that it conforms to the Army's automation/communications requirements.

[1]Accounting Systems: Army's Efforts To Redesign Its Accounting Systems (GAO/AFMD-87-19, May 19, 1987).

The Army Requests $48 Million to Replace ADP Equipment

- Replacement was planned for 1989; however, funding was not approved.
- Funding for 1990 replacement is still pending within the Army.
- Required analyses/studies not begun.
- Final ADP equipment replacement decision has not been made.
- Army officials believe they will have enough time to prepare for procurement if funding is approved this year.

The Army Requests $48 Million to Replace ADP Equipment

In 1985, the General Services Administration required the Army to submit a comprehensive procurement plan for the competitive replacement of the Center's Sperry/UNIVAC computers. In response, the Center developed a plan calling for the award of a replacement contract in 1989. Funding in support of this plan, however, was not approved by the Army. According to Army officials, the modernization has historically had problems competing with other Army programs for funding. At the time of our review, another funding request for $48.1 million was pending within the Army. This request calls for the replacement to begin during fiscal year 1990.

According to Center officials, the Army has not performed a requirements analysis or a conversion study because of a lack of funding and manpower. Both the analysis and the study are required by federal regulation and are early steps in the procurement process. The requirements analysis starts with mission needs and translates them into ADP requirements. The analysis must include an examination of anticipated efficiency improvements, workloads, functions to be performed, agency components involved, and alternatives to complete replacement.

Conversion from one type of computer and operating system to another requires planning. Without proper planning, moving applications software from one computer to a noncompatible computer may be so expensive as to be a major impediment to effective competition by a noncompatible vendor. To ensure that software conversions are adequately considered, a conversion study—which includes a thorough analysis of operating characteristics and requirements in both the present and target ADP environments, and a plan for moving from one environment to the other—is a required step in the procurement process.

According to Army and Center officials, until these studies are completed, there is no firm basis for determining what type of equipment, if any, should be purchased. In explaining why a request for new equipment had been submitted within the Army before the required studies were performed, Army officials stated that their decision was based on two factors—the obsolescence of the Sperry/UNIVAC equipment and estimates of future computer capacity needs based on historical computer utilization data. The Army's Director of Finance and Accounting gave several reasons, however, why these historically based estimates may not be good measures of requirements. First, the Center is using a number of tools to design the new subsystems. These tools use a substantial portion of the system capacity. Upon completion of the modernization, the computer capacity used by the tools will be available for

production. Second, the end user will be doing more computing. This could free additional computer capacity. Third, more computer capacity will be used if additional manual tasks are computerized.

These officials recognize that before any specific equipment need can be established, the requirements analysis and conversion study must be completed. In fact, the Director of Finance and Accounting and the Commander, Information Systems Command, were to begin discussing a strategy for performing these studies in late 1987.

Army officials stated that if the current $48.1 million funding request was approved in the near future, they would have enough time to complete the necessary studies so that the ADP equipment could be replaced beginning in fiscal year 1990. At the close of fiscal year 1987, this funding request was still pending.

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Factors Having an Impact on Finance Center Procurement

- The current accounting systems strategic plan
  - does not contain an acquisition plan, but does show 1990 as the procurement date.
  - Specifies a particular architecture and operating systems.
- Systems at the Center will have to be converted to the new system.
- Possible consolidation of the following Fort Benjamin Harrison computer facilities:
  - The U.S. Army Finance and Accounting Center.
  - Soldier-Support Center.
  - Enlisted Records Evaluation Center.

Factors Having an Impact on Finance Center Procurement

Although it does not contain a formal acquisition plan, the July 1987 Army Accounting System Strategic Plan shows 1990 as the procurement date for replacing the Sperry/UNIVAC ADP equipment located at the Center. In addition, this latest strategic plan calls for the use of specific operating systems within a 3-tier architecture. According to the Army, this 3-tier architecture would allow greater integration among the Army's computer systems and more efficient use of computer resources. The architecture levels are as follows:

- Tier 1—large computer centers, such as the Finance Center, that support multiple Army installations/organizations.
- Tier 2—installation/organization-based centers that are configured to support the specific needs of the installation/organization.
- Tier 3—individual terminals or workstations where data is input, output is received, and end-user computing is performed.

The designation of specific operating systems within the 3-tier architecture standards, however, would have restricted competition to vendors with equipment capable of using those operating systems. Consequently, in April 1987, the Deputy Secretary of Defense directed the Army to withdraw the standards. According to Center officials, the requirements to use these standards in acquiring ADP equipment and services for accounting systems modernization will be removed from the next version of the strategic plan, scheduled for release in January 1988. We are currently reviewing the Army's efforts to standardize its ADP architecture and operating systems and plan to discuss this in a separate report.

When vendor-unique features—such as data base management systems—are extensively used, converting applications to run on different computers can be prohibitively expensive and can adversely affect the competitive position of vendors with noncompatible equipment. At the Center, large portions of the current ADP systems are using a Sperry/UNIVAC-unique data base management system, as are two of the subsystems currently being designed (PBAS and MPR). According to Army officials, however, using this unique data base will not favor Sperry/UNIVAC contractors during the competitive replacement because the current data base management system does not meet Army standards. Therefore, regardless of which vendor's equipment is selected for the replacement, the data base management system will have to be replaced and the applications on it converted.

Another issue we discussed at the briefing was the possible consolidation of the three data processing centers located at Ft. Benjamin Harrison. In addition to the Center's computer operations, which use Sperry/UNIVAC equipment, there are also computer centers supporting the Army personnel system (Enlisted Records and Evaluation Center) and Ft. Harrison's base operations (Soldier Support Center). Consolidating these centers could cause equipment compatibility problems because the latter two centers both have application software that will only run on IBM or IBM-compatible equipment. Depending on the consolidation approach taken by the Army, this situation could have an impact on the cost of the replacement equipment and/or the degree of competition available. For example, if the Army establishes a consolidation goal to develop a fully integrated computer center, it would need to either

- acquire IBM or IBM-compatible equipment to match that already in place at two of the centers, or
- replace the entire suite of equipment at all three centers.

If the goal is not established, this consolidation would only involve placing all the computers in the same location—it will not result in a completely integrated facility. At the time of our review, Army officials said that consolidation was a long-term goal and was still in the discussion stage; it was not included in the plans or funding request for the Center's competitive replacement.

According to the Federal Information Resources Management Regulation, before the Army replaces the Center's computer equipment, it must perform a thorough analysis to ensure that its acquisition strategy includes the most efficient and economical approach and maximizes competition. Considering the consolidation issues as part of this analysis would help ensure that all computer hardware needs are addressed as part of the replacement decision.

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